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METHOD OF LOGIC CIRCUIT SYNTHESIS AND DESIGN USING A DYNAMIC CIRCUIT LIBRARY

ABSTRACT OF THE DISCLOSURE

The circuit library available for logic synthesis is limited to a single dynamic circuit block or logic synthesis block. The circuit design method includes first defining the logic synthesis block (16) and then performing logic synthesis (17) for a predetermined logical operation to be implemented. The logic synthesis step constrained to the single logic synthesis block produces an intermediate circuit design (29) which necessarily comprises a series of dynamic circuit blocks, each associated with a single reset signal. Once the intermediate circuit (29) is produced, the circuit design method includes eliminating unnecessary devices (46) from the intermediate circuit (29) to produce a final logic circuit, and then sizing the devices (48) in the final circuit to complete the design.